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Todd, Thomas Wingate

Practical race improvement

[Cleveland, Ohio]

1930

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PRACTICAL
RACE IMPROVEMENT

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PRACTICAL RACE IMPROVEMENT

BY
T. WINGATE TODD
Brush Foundation

National Conference of Social Work
Boston Meeting
June 14, 1930

PRACTICAL RACE IMPROVEMENT

T. WINGATE TODD

THE URGE

Race Improvement is a subject much talked of today, so much so that the very title makes one wonder for the sanity or at least the seriousness of the individual bold enough to bring the subject once more under review. Anthropology teaches us that the more primitive a man is the more purposeful he is. His whole life indeed becomes one long drudgery of calculation. Though his reasoning be wrong he never stops scheming and values nothing that has no meaning for his welfare. Civilization on the other hand provides us all with leisure and removes this dreadful pre-occupation with life. It gives us liberties and opportunity to busy ourselves with strange themes and whimsical imaginings. New pinnacles of fatuity are stormed day by day. The Baltimore pole-sitters must surely be accorded the highest perch of lunacy and yet I read of a Sunday School which organized a competition to discover which of its scholars could produce the greatest number of warts.

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Is Race Improvement some new peak of Idiot's Joy, some senseless dream of a too-leisured civilization or perhaps the purposeful illogical striving of a defective primitive reason. Or is it possible that there may be something practical in the theme after all.

The other day I opened a book by William Buchan, M.D., Fellow of the Royal College of Physicians, printed in 1809 for Joseph Bumstead, Boston, and on sale at his bookstore No. 77 State Street hard by. The pages fell apart at a chapter headed "Sketch of a plan for the preservation and improvement of the human species." After some observations upon the breeding of cattle, laudation of Cornelia as a proper example of motherhood, scant justice to the eloquence of the pulpit, the efforts of the schoolmaster and the corrective power of the civil magistrate, the writer reflects upon the importance of early impressions and progressive improvement of body and mind alike. Then comes the pointing of the moral. "If," he suggests, "the early part of education, which concerns us most, had been designed for fathers, the Author of Nature would doubtless have furnished them with milk for the nourishment of their children." Therefore he addresses "this little book of instruction to females, calling upon the tender and provident mother to nurse her own child and preserve the rising shrub from the shocks of human prejudice"! So much for Bertrand Russell's recent disparagement of the feminine care of children who are "irretrievably ruined by spending their early life in the company of foolish women who are afraid of the dark, spiders, mice and rough men."

We used to think of Malthus as having started a new thought in his Essay on Population. He was but expressing the current thought of his time, thought which doubtless has been current throughout man's history and will continue to be until the end. For human nature does not change. It will ever be, as it has ever been, a conglomeration of fair maids, warm hearts, and cold steel and we may as well make up our mind on that.

There is no need to recite the long list of remedies proposed for population ills. Of these the most sensational are Sterilization of the Unfit and Birth Control. The latter in various forms has always been current: the former is a recent suggestion. They are apt to force themselves upon our attention by their apparent ruthlessness but must not crowd out equally or more potent measures such as Mothercraft, Infant Prophylaxis, Milk for School Children, the beneficent work of the Health Couucils, School Medical Service and Associated Charities. Race Impromevent is as much a social problem as a medical one. And we must not permit ourselves to chase some fantasy of the mind in our endeavor.

THE PROBLEMS

Recently I read a tale, I'm sure it was a tale, of a doctor who had an ecstatic vision of a renewed world. For twenty years, the tale runs, Dr. Firth had devoted his time and private fortune to a study of the endocrine glands with the object of raising human efficiency. At last he had done it. There was no doubt about it and he hastened to confide in his closest friend. Human efficiency raised ten, twenty, perhaps fifty percent! "In what direction," asked the friend. "In every direction. It increases the physical and mental efficiency all round. After taking it you remain the same person but, as it were, raised to a higher power." "Expensive?" "No, on the contrary, the humblest pauper may profit by it." "You will protect your discovery?" "By no means." "Does it act better on some subjects than on others?" "So far as I can judge, no. It will not affect the subject's natural tendency, but will increase his normal efficiency." "And does that not mean," pursued his friend with inexorable logic, "that if the whole world took your nostrum our relations would remain precisely as they are at present?" That is the end to which most of our efforts are destined. It has caused the cynics to argue even that infant prophylaxis is dysgenic and that we are actually destroying the fabric of humanity by our humanitarian schemes.

Let us look into this for a moment. Through the efforts of agencies such as those instanced above we have cut down our child mortality and have increased the expectancy of life for our rising population. We have also made it a healthier generation on the whole though it is true that many children of relatively feeble constitution have been conserved who would otherwise undoubtedly have perished. These, it will be admitted, may grow to maturity and may themselves have children who may have or may not continue the defects in constitution exhibited by their parents. But meantime there is a very distinct falling off in the birth rate. For whereas, according to Dublin's investigations, the figure was about eight children per mother in 1790, a birth rate of about 50 per 1,000 persons per annum, it fell to 37 per 1,000 persons in 1872 and to 23 per 1,000 persons or 3.7 children per mother in modern times (101 children per 1,000 women per annum). The falling of the birth rate is therefore very significant during the past fifty years. Since restriction of immigration has materially reduced the number of potential mothers in recent years a still more marked fall in birth rate may be expected in the near future. But to maintain population equilibrium 3.15 children per mother is the absolute minimum compatible with our present numbers and though it may be expected that there will be further elimination of the scourges afflicting mankind, nothing spectacular need be contemplated. The margin of safety is therefore, even

now, only 0.55 in excess of the minimum. Twenty or thirty years ago, we are warned by Dublin, our present rate of reproduction would have barely sufficed to maintain the American population at a standstill. Since then is is only the improvements in general hygienic conditions which enable us to carry on at all with the present rate of reproduction.

It is apparent without laboring the point that population problems are as much social questions as biological and that actual reduction of our effective population is detrimental to our social fabric. Everything which can be done to conserve and to render our growing children more healthy and efficient is necessary in view of our low birth rate. There can be nothing therefore dysgenic in conservation. Again nothing is to be gained by crude birth control. On the contrary maternity regulation with adequate spacing of children is one of the most important of modern measures for the creation and conservation of constitutionally healthy children. We are also beginning to realize the importance of enlisting the interest and co-operation of the fathers as well as of the mothers.

Some attention must be given at this stage to the possibilities of heredity for it is constantly brought to our notice that there is a tendency for the wrong people to reproduce most vigorously. Such agitation is indeed not well founded. Adequate financial stability and social position in the parents have never been conductive to large familiies. There has always been recruiting from below and it is certain to continue. The recruiting has brought us to our present level of national success and there is no reason to assume any fundamental alteration in the conditions which make for success.

When the time came to choose a name for the eldest son of Lord Tennyson the poet, a natural suggestion was made that the child be call Alfred after his father. But Tennyson himself brushed aside the thought moodily with the observation "Suppose he turns out to be a fool." Galton would have said that this child had five hundred times as much chance of success in life as an ordinary mortal. But Galton did not include the possibilities of nepotism or the advantages of a superior education. And even heredity has its drawbacks. The second Duke of Wellington who was certainly no fool once made a rather pathetic allusion to the extinguishing effects of having a distinguished and long-lived father.

It is better that we do not segregate too definitely the influences of heredity and environment, even if we could. We should rather consider the heritage of the child by which is meant the equipment for success in life conferred upon the child by his parents through both means combined. The population conditions which have brought about increase in the past, cause considerable popular apprehension for the future. It is natural that we should be concerned for the conditions of life, encountered by our children and children's children

though this concern would sit better were it accompanied by less frantic waste of natural resources for which our successors will have to pay. And it is right that we should do everything possible to increase the effectiveness of our present and future citizenry. But while it is a man's problem to provide for future welfare, the production of citizenry is a woman's problem. That is why I have referred to the birth rate in terms of children per mother. Professor Wolfe has recently very properly called attention to the necessity of securing objectivity in population theory by considering the interests and attitude of the potential mothers and the impossibility of determining a rational population policy unless we take account of the way in which half the race will probably calculate the costs against the the satisfactions of large families.

I have said enough on this score. There is, however, another angle of the population problem which we must consider. It is true that span of life has not been extended. It is also true that expectancy of life has not been raised for people forty years old in recent times. Probably those men and women of today have even less chance of living to old age than their predecessors of a century ago. If we set aside estimates made from very limited records of the ages attained by important personages and also treat with the caution they deserve the funereal inscriptions of late Roman and early Christian times, and pin our faith to the actual records observable in the skeletons of our forerunners during the Christian Era there is no doubt that the last two or three centuries have seen a striking increase in the number of people of both sexes who have attained relative old age. While these folk have not raised our reproductive rate they have formed a solid additional block to the population. But they have also constituted one of our chief assets inasmuch as their survival means the passing on of experience from the adult parent to the adult child. I doubt very much if this theme has ever received, at the hands of our essayists today, the recognition it deserves.

One last consideration before our survey can be complete is feeble-mindedness. I am not considering frank insanity which sufficiently demands its own treatment, but rather the individual with so narrow a margin of mental equipment that, under modern conditions of life, he hangs ever in the balance between social effectiveness and social failure or, it may be, social antagonism.

Feeble-mindedness must always be a relative term for there is implicit in it a reference to the social environment which the person in question is called upon to meet. Stress of life fluctuates with economic and industrial conditions. Observations carried on during and since the war indicate that the degree of stress is mirrored in the mortality of the time. We find that in such a year as 1917–18 the pauper burials in Cleveland are those of men of very poor physical quality and of low mental caliber as measured by relative cranial capacity. In a period of industrial distress such as that of 1921–22 much better types and

larger brains are found among the pauper burials. The unfit measured even by so crude a standard are selected by relative social status rather than physical characteristics. Were there adequate random mixing of population probably feeble-mindedness would never get a grip on humanity. This may be the reason why feeble-mindedness has not become a greater menace in the history of men. Boas has pointed out that the most diverse types of man may adapt themselves to the same forms of life and that, unless the contrary be proved, we must assume all complex activities to be socially determined, not hereditary. When attempts are made to prove that defects or points of excellence are hereditary it is essential that all possibility of a purely environmental or socially determined repetition of ancestral traits be excluded. Now it is perfectly true that a feeble-minded taint is hereditary and also true that a feeble-minded people tend to mingle for companionship and marriage. The appalling genealogical trees of feeble-mindedness prove no more than these definite facts. They do show, however, the tragedy of families stigmatized as so tainted. These are terribly handicapped socially so that they include a relatively large number of social failures and anti-social persons who might very often quite properly ascribe their unfortunate position to social ostracism and other environmental influences just as many young criminals may be adequately explained, though not excused, by the conditions in which they are compelled to live. It is this argument which lies at the root of the very natural hesitance to push schemes for sterilization of the feeble-minded except under the most stringent safeguards.

THE MANAGEMENT

With this review fresh in our minds how shall we apply ourselves to race improvement. Our object is laudable but our methods must be practical. There can be no general panacea and our goal cannot be attained in short order by any scheme which contemplates compulsion or subversion of our social organization. Our methods must clearly be controlled by adequate medical knowledge and social understanding. To this end, Dr. Brush has dedicated the Foundation which he established. In the first place our children must be well born. That means proper spacing in the interests of both parents and child. It means the spread and increased efficiency of the prenatal clinic and the safeguarding of maternal health. In the second place our children must be well nurtured. That means development of the infant prophylaxis clinics and fostering the agencies which devote themselves to physical health and mental well-being among our young people. Above all it calls for unrelaxing effort to continue the improvement of our social and industrial organization. By human toleration and sympathetic understanding much can be accomplished. The very stability and predictability of response which are so characteristic of mankind give us clear ground for optimism.

Dr. Brush was a very practical humanitarian and his thoughts were therefore directed to the betterment of human Stock rather than of social conditions. Nevertheless he was quick to realize the interaction of both these tremendous forces and he bade us not to forget the one in preoccupation with the other.

It is quite obvious that, apart from the general measures for physical and social betterment outlined above, we can expect no specific progress unless we have quite definite standards towards which we can work. We must have some means of assessing the worth of our population, present and future. We must know its original value and must register the influence upon it of the adventures of life.

The Brush Foundation has set itself, in the first place, to develop standards of potential citizen-value more searching and reliable than those of height and weight, of well- and ill-nourished condition, and of mental efficiency so far at our service.

Our basic problem is therefore a survey of the successive features in human development and an inquiry into their modification by initial handicaps, by the ravages of disease and other misfortunes encountered by the growing child.

The body is a co-ordinated framework of bones, brawn, breath and blood

within which are hung the special organs having their own time schedules of maturation. Any one of the four mentioned may be used as an index of development, but the skeleton is most readily investigated, and registers the fossil records of metabolic disaster as clearly as it marks the bodily progress towards maturity. With three or four exceptions investigators have hitherto attempted to interpret bodily development in terms of bulk, thereby introducing a fatal complication which has persistently nullified their efforts whether these be expressed as body bulk, namely height and weight, or as bulk measurements of small selected areas such as the wrist bones.

Adequate understanding of the principles involved in skeletal development as distinct from skeletal growth permits a ranking far more exact and convincing than the figures derived from numerical measurements. Since this ranking is equally applicable to all mammals it makes possible comparison of developmental patterns and time schedules between man and those animals upon which collateral studies of nutrition and behavior are customarily carried out.

The method changes its technique for successive periods of childhood. Between birth and five years differential growth of skull and long bones is utilized. Between five and twelve years bony penetration of cartilaginous areas gives the necessary standards. From twelve to twenty-three years the successive cessation of growth and knitting of parts of the skeleton (epiphyses) mark progress.

The necessary skill can be attained without great difficulty but calls for adequate training upon roentgenograms and actual skeletal material of which the dearth at appropriate ages has hitherto acted as a handicap and deterrent. This was the first difficulty which we have successfully overcome.

Our studies so far have given us important data upon which to base our further work.

We now know that man, apes and monkeys differ from all other animals in having a relatively long period of infancy and childhood. A horse, for example, attains in four years that maturity which is reached in the monkey of much smaller bulk at the end of seven years.

We have also discovered that the difference between man and apes is that, whereas both have a long childhood and reach the same stage of development between five and six years, the apes thereafter spring ahead, becoming mature in two years more whereas man, much slower in his adolescence, attains maturity about twenty-three years. This adolescent lag is man's most striking feature and is responsible for the problems of the second decade.

By the same standards we can study individual human variation. We find that variation is not due to chance but to definite causes. Hypothyroidism for example is one of the factors which repress development both of body and mind.

Social conditions have a marked effect so that the high grade child is about nine months in advance of the average on our physical and psychological tests.

It is easy to see how we can apply our methods to the precise registration of the effect of rickets, measles, dietetic disorders, infantile paralysis, chest troubles and other misfortunes lying in wait for our growing children.

We can also assess the undernourished, the mentally dull and the feeble-minded.

Let me show you how we are coping with the actual problems which we face in assessing the children and the adventures of their childhood years.

The first tremendous adventure is indeed the experience of being born. The child must now adjust himself to an altogether new and sudden change in form of nutrition. This adjustment is registered physically and we find between two months and six months, in the bones, the evidence of this adjustment. Some children take kindly to their new diet, others go through a few months of difficulty. But a healthy child is properly adjusted by the sixth postnatal month. This is the earliest experience which must have some powerful influence upon general bodily development. Inasmuch as the mind has its physical basis we ought to be able to detect in the mental development of these early months, a reflection of the physical stress through which the child has passed.

The next adventure lies in encountering or successfully avoiding infantile disorders like rickets, summer diarrhoea, and the infectious fevers. These leave a fossil record on teeth and skeleton and must influence developmental progress of body and mind alike. At best they mean irregularity or discontinuity in development.

The rapidly expanding environment and constant adjustment of his vigorously growing body and mind during the school years constitutes the third adventure. Evenness and co-ordination of physical and mental development together and with his years ensures a balanced relationship to social conditions. But let some imperfection occur in this co-ordination and we have all the elements for social maladjustment ready to hand.

The fourth adventure is the stressful time about the twelfth year when a number of new factors are beginning to play vigorously if not ferociously upon his organic self. Here we encounter those irregularities which, in contrast with the uniformity and rapidity of anthropoid development, constitute the human adolescent lag of which I have spoken.

In our physical determinations I am surprised to find relics of the anthropoid in bone texture and in a tendency displayed by some children especially between ten and thirteen years to rush physical development to completion in a space of two or three years as the anthropoid does. Others are far slower and more human. Others again seem to lack something, probably a genital endocrine, so that their bodily development begins to flag about thirteen years

and slowly peters out like a clock which has not been rewound. Development will cease at a stage between fourteen and nineteen years.

In hypothyroid or otherwise handicapped children such observations as we have made show that the range of the psychological report terminates above at about the physical stage registered by the skeleton. For example a child say of fifteen whom I find to be at the twelve-year physical stage will show a psychological range of six to thirteen. There seems to be a mental handicap which may be in part the result of maladjustment.

Physically we have compared Sicilian with Anglo-Saxon and Teutonic Stocks and Negroes with Whites: samples of all these differ in body bulk but develop equally, in their time relationship, towards maturation. The Negroes show far greater variation than the European Stocks. When we analyse this we find it is not a true variation but one dictated by the ravages of disease and the adventures outlined above.

In the light of this clearer understanding and definite registration of the handicaps under which mankind labors we apply ourselves to practical race improvement. I have indicated some of the measures from which much may be expected in the future and I have sketched the method by which we hope to attain further definite progress.

It was sentiment, not science, which first bade us look at humanity. We build up our ideals, not by casting away the past, but by utilizing the work of those who have labored before us.

One of the most inspired passages in modern scientific writing, penned by Dr. Boas, is especially applicable in all our efforts towards race improvement. I must quote it in full as a warning and a guide.

"Whatever our generation may achieve will attain in course of time that venerable aspect that will lay in chains the minds of our successors, and it will require new efforts to free a future generation of the shackles that we are forging. When once we recognize this process, we must see that it is our task not only to free ourselves of traditional prejudice, but also to search in the heritage of the past for what is useful and right, and to endeavor to free the mind of future generations so that they may not cling to our mistakes, but may be ready to correct them."

ABSTRACT

The theme of race improvement is not a new one: it has attracted definite attention for nearly a century and a half though the adoption of measures with this specific object in view have been of slow growth. The spectacular efforts at sterilization of the unfit and crude birth control are by no means the most effective. Less striking but more in accordance with public feeling are the work of the Health Councils, the School Medical Service, the Associated Charities, Infant Prophylaxis, Maternal Health and Maternity Regulation and Mothercraft, which together have already produced a material improvement.

Race improvement is as much a social problem as a medical one. In view of the declining birth rate measures for conservation of the children are certainly not dysgenic.

It is difficult to segregate out the influence respectively of heredity and of environment and perhaps the most satisfactory solution is the combining of both as a problem of heritage.

Welfare is a man's problem but the production of citizenry is a women's problem and no population theory or policy can be truly objective unless it takes account of the interests and probable responses of women.

Feeble-mindedness is a relative term and must have reference to social conditions. The relatively recent rapid increase in the stress and complexity of our life has thrown feeble-mindedness into sharp relief and fixed upon it a stigma which spreads beyond the feeble-minded themselves to all their healthy blood relations, handicapping them and even turning some of them into anti-social persons. Hesitance in proceeding to extreme measure in cases of feeble-mindedness is therefore easily comprehensible.

Our chief need today is a more effective method of measuring human capacity and of removing the disabilities which limit and reduce its adequate expression. In this field the Brush Foundation has already done good work and to its researches we owe significant advances in our understanding of the probable efficiency of the methods in practical use.

Without giving a full bibliography for reference, the following are suggested to the reader as an introduction to the subjects touched upon in this address.

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